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EXAMINER

CHEN, QING

ART UNIT

PAPER NUMBER

2191

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/700,017	<b>Applicant(s)</b> MCVOY ET AL.	
	<b>Examiner</b> Qing Chen	<b>Art Unit</b> 2191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14, 16 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16 and 18-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20080110</u> .  | 6) <input type="checkbox"/> Other: _____                          |

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### **DETAILED ACTION**

1. This Office action is in response to the amendment filed on June 3, 2008.
2. **Claims 1-14, 16, and 18-21** are pending.
3. **Claims 1, 10, and 20** have been amended.
4. **Claims 15 and 17** have been cancelled.
5. The objection to Claim 20 is withdrawn in view of Applicant's amendments to the claim.
6. The 35 U.S.C. § 112, second paragraph, rejections of Claims 16 and 18-21 are withdrawn in view of Applicant's amendments to the claims.

### ***Response to Amendment***

#### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1, 3-10, 12-14, 16, and 18-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,912,707 (hereinafter "**Fontes**") in view of US 6,226,652 (hereinafter "**Percival**").

As per **Claim 1**, Fontes discloses:

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- producing a first set of stacked diffs between the first drawing file and the common drawing file (*see Figure 6; Column 4: 42-50, "... architect is creating revised base drawing 602."*; *Column 9: 7-12, "These 'changes only' files are called 'Diff Files.'"* and *"... instead of sending the entire revision 302 file back to architect 200, engineer 204 can send only the changes that engineer 204 made to base drawing 300."*);

- producing a second set of stacked diffs between the second drawing file and the common drawing file (*see Figure 6; Column 4: 42-50, "Architect 200 creates base drawing 300 and sends base drawing 300 to engineer 204 via path 202. While engineer 204 is creating revision 600 ..."*; *Column 9: 7-12, "These 'changes only' files are called 'Diff Files.'"* and *"... instead of sending the entire revision 302 file back to architect 200, engineer 204 can send only the changes that engineer 204 made to base drawing 300."*);

- simultaneously displaying the first and second sets of stacked diffs, wherein common lines of the first and second sets of stacked diffs are aligned and new lines of each of the first and second sets of stacked diffs are aligned with blank lines of the other stacked diff (*see Figures 10 and 12; Column 6: 40-48, "... the user can define which file is considered the revision 302 and which file is considered the revised base 500, such that the user-defined revision file 302 appears on the left and the user-defined revised base 500 file appears on the right."*; *Column 7: 1-5, "Window 1200 contains windows 1202 and 1204, which display the layer information for base drawing 300 and revision 302. Window 1200 can also be used with the merge and parallel evolution mode of the present invention. If a layer is missing from either base drawing 300 or revision 302, the layer appears as a blank line in the other drawing file's window 1202 or*

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1204.”; Column 9: 11 and 12, “The comparator 120 then uses the diff file as the revision file 302 for comparison purposes.”); and

- merging the first drawing file and the second drawing file to produce a merged result (see Column 6: 35-39, “In merge mode, button 1010 allows the user to merge the changes of revised base 500 shown in window 1004 into revision 302 shown in window 1002.”).

However, Fontes does not disclose:

- text files and lines of text; and
- providing to a user a conflict resolution pane which accepts user-generated textual modifications to the merged result.

Percival discloses:

- text files and lines of text (see Figures 3-9); and
- providing to a user a conflict resolution pane which accepts user-generated textual modifications to the merged result (see Figure 8: 704; Column 4: 67 to Column 5: 1 and 2, “An “Edit” button 344 allows the user to edit a selected line in the Merge Target ...” and 60-67, “If the response to decision block 960 is yes (the user is merging the versions), the system highlights the differences and places selection emphasis on the next one at block 964. The user selects the DataBase or Local version of that difference at block 966, and the system places it into the Merge Target, preserving the color to show the origin at block 968. The user may then edit the line, if desired, by selecting the Edit button.”).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Percival into the teaching of Fontes to include text files and lines of text; and providing to a user a conflict resolution pane which accepts user-

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generated textual modifications to the merged result. The modification would be obvious because one of ordinary skill in the art would be motivated to merge a set of changed text files and allow subsequent modifications (*see Percival – Column 1: 22-25*).

As per **Claim 3**, the rejection of **Claim 1** is incorporated; and Fontes further discloses:

- wherein conflicts between the first and second text files are displayed and only one conflict is active at a time (*see Column 6: 26-30, “Window 1002 displays revision 302, and window 1004 displays revised base 500. In window 1002, line 1006 is shown as a dashed line, and in window 904, line 1008 is shown as a solid line. This indicates to the user that line 1006 and line 1008 are different between the two drawings.”*).

As per **Claim 4**, the rejection of **Claim 3** is incorporated; and Fontes further discloses:

- displaying version control system metadata relating to the active conflict (*see Column 9: 38-41, “Prior to applying the diff file, the comparator compares the identification values of the base drawing 300 and the diff file, and warns the user if the values don't match.”*).

As per **Claim 5**, the rejection of **Claim 4** is incorporated; and Fontes further discloses:

- wherein version control system metadata comprises a revision number, date, checkin comments, and/or user identification pertaining to the version in which data was created (*see Column 9: 13-17 and 35-38, “A diff file must contain enough information to add ... data.” and “To ensure that the correct base drawing 300 is undergoing the comparison by comparator 120, the diff file contains a identification that is compared to the base drawing 300.”*).

As per **Claim 6**, the rejection of **Claim 4** is incorporated; and Fontes further discloses:

- wherein version control system metadata comprises a revision number, date, checkin comments, and/or user identification pertaining to the version in which data was deleted (*see Column 9: 13-17 and 35-38, “A diff file must contain enough information to ... delete data.” and “To ensure that the correct base drawing 300 is undergoing the comparison by comparator 120, the diff file contains a identification that is compared to the base drawing 300.”*).

As per **Claim 7**, the rejection of **Claim 4** is incorporated; and Fontes further discloses:

- searching an active conflict of the first and second sets of stacked diffs (*see Column 9: 13-17, “A diff file must contain enough information to add, modify, and delete data ... This data is stored as a series of operations. When the user applies a diff file as a revision 302, comparator 120 iterates through the database operations and applies each one to the base drawing 300.”*);
- creating a list of revisions for lines of text deleted from the active conflict (*see Column 9: 18-22, “Viewing the diff file as a collection of records, a typical record for entity data would have an operation that is performed on the entity, e.g., update, delete, or insert; data needed if the operation is an update or insertion, and the handle of the entity, if it is an update or deletion.”*);
- creating a list of revisions for lines of text added to the active conflict (*see Column 9: 18-22, “Viewing the diff file as a collection of records, a typical record for entity data would have an operation that is performed on the entity, e.g., update, delete, or insert; data needed if*

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*the operation is an update or insertion, and the handle of the entity, if it is an update or deletion.”); and*

- displaying the version control system metadata relating to the deleted lines of text and/or the added lines of text (*see Column 9: 38-41, “Prior to applying the diff file, the comparator compares the identification values of the base drawing 300 and the diff file, and warns the user if the values don't match.”*).

As per **Claim 8**, the rejection of **Claim 7** is incorporated; and Fontes further discloses:

- displaying creation information or deletion information for deleted lines of text (*see Column 6: 32-34, “Thus, the comparator considers revision 302 to be correct, and displays changes to revision 302 instead of revised base 500.”*).

As per **Claim 9**, the rejection of **Claim 3** is incorporated; and Fontes further discloses:

- alternatively displaying or not displaying deleted lines of text in the active conflict in the first and second set of stacked diffs (*see Column 5: 54-59, “Other indications of differences between base drawing 300 and revision 302 are possible with the present invention, e.g., lines can be displayed in different colors, can ‘blink’ on and off to show differences, or any other manner of indicating to the user that something has changed between the two drawings.”*).

As per **Claim 10**, the rejection of **Claim 1** is incorporated; however, Fontes does not disclose:



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- selecting one line of text or block of lines of text from either of the first and second sets of stacked diffs;

- copying the selected lines of text to the conflict resolution pane; and

- repeating the selecting and copying steps to produce the merged result.

Percival discloses:

- selecting one line of text or block of lines of text from either of the first and second sets of stacked diffs (*see Column 5: 60-62, "If the response to decision block 960 is yes (the user is merging the versions), the system highlights the differences and places selection emphasis on the next one at block 964."*);

- copying the selected lines of text to the conflict resolution pane (*see Column 5: 63-66, "The user selects the DataBase or Local version of that difference at block 966, and the system places it into the Merge Target, preserving the color to show the origin at block 968."*); and

- repeating the selecting and copying steps to produce the merged result (*see Column 5: 67 to Column 6: 1-4, "It is then determined at decision block 970 whether or not this was the last difference to be resolved. If the response to decision block 970 is no, the present invention returns to block 964, as previously described above."*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Percival into the teaching of Fontes to include selecting one line of text or block of lines of text from either of the first and second sets of stacked diffs; copying the selected lines of text to the conflict resolution pane; and repeating the selecting and copying steps to produce the merged result. The modification would be obvious

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because one of ordinary skill in the art would be motivated to allow a user to merge a set of changed text files (*see Percival – Column 1: 22-25*).

As per **Claim 12**, the rejection of **Claim 10** is incorporated; and Fontes further discloses:

- moving to a successive or previous conflict (*see Column 6: 4-8, “If the user wants the final drawing to look like the revision 302, the user can select the next button 914 to go to the next change. If the user goes past a change and wants to review it again, the user can review previous changes by selecting button 912 ...”*).

As per **Claim 13**, the rejection of **Claim 1** is incorporated; and Fontes further discloses:

- alternatively displaying or not displaying deleted lines of text in the first and second sets of stacked diffs (*see Column 5: 54-59, “Other indications of differences between base drawing 300 and revision 302 are possible with the present invention, e.g., lines can be displayed in different colors, can ‘blink’ on and off to show differences, or any other manner of indicating to the user that something has changed between the two drawings.”*).

As per **Claim 14**, the rejection of **Claim 1** is incorporated; and Fontes further discloses:

- alternatively displaying or not displaying annotations with the first and second sets of stacked diffs (*see Figures 16A and 16B; Column 7: 56-63, “FIGS. 16A and 16B illustrate summaries of the comparison presented by the present invention. FIG. 16A illustrates the comparator 120 of the present invention outputting on window 1600 a list of all files compared*

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*in the comparison described in FIG. 15. The summary is shown in result order in FIG. 16A, and file alphabetical order in FIG. 16B.”).*

**Claim 20** is a computer readable medium claim corresponding to the method claim above (Claim 1) and, therefore, is rejected for the same reason set forth in the rejection of Claim 1.

As per **Claim 16**, the rejection of **Claim 20** is incorporated; and Fontes further discloses:

- wherein simultaneously displaying the first and second sets of stacked diffs comprises displaying version control metadata relating to an active conflict (*see Column 9: 38-41, “Prior to applying the diff file, the comparator compares the identification values of the base drawing 300 and the diff file, and warns the user if the values don't match.”).*

As per **Claim 18**, the rejection of **Claim 20** is incorporated; and Fontes further discloses:

- computer program code for displaying annotations in the first and second sets of stacked diffs (*see Figures 16A and 16B; Column 7: 56-63, “FIGS. 16A and 16B illustrate summaries of the comparison presented by the present invention. FIG. 16A illustrates the comparator 120 of the present invention outputting on window 1600 a list of all files compared in the comparison described in FIG. 15. The summary is shown in result order in FIG. 16A, and file alphabetical order in FIG. 16B.”).*

As per **Claim 19**, the rejection of **Claim 20** is incorporated; and Fontes further discloses:

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- computer program code for alternatively displaying or not displaying deleted lines of text in the first and second sets of stacked diffs (*see Column 5: 54-59, "Other indications of differences between base drawing 300 and revision 302 are possible with the present invention, e.g., lines can be displayed in different colors, can 'blink' on and off to show differences, or any other manner of indicating to the user that something has changed between the two drawings."*).

As per **Claim 21**, the rejection of **Claim 20** is incorporated; however, Fontes does not disclose:

- computer program code for selecting one or more lines of text from each of the first and second sets of stacked diffs and for copying the selected lines of text to a conflict resolution pane.

Percival discloses:

- computer program code for selecting one or more lines of text from each of the first and second sets of stacked diffs and for copying the selected lines of text to a conflict resolution pane (*see Column 4: 9-12, "To merge the files, User A must mark blocks or lines of code to be excluded from the target (i.e., the file which will be checked into the database), and then saves and checks in the resulting file."*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Percival into the teaching of Fontes to include computer program code for selecting one or more lines of text from each of the first and second sets of stacked diffs and for copying the selected lines of text to a conflict resolution pane. The

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modification would be obvious because one of ordinary skill in the art would be motivated to allow a user to merge a set of changed text files (*see Percival – Column 1: 22-25*).

9. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Fontes** in view of **Percival** as applied to Claim 1 above, and further in view of US **6,275,223 (hereinafter “Hughes”)**.

As per **Claim 2**, the rejection of **Claim 1** is incorporated; however, Fontes and Percival do not disclose:

- wherein the first and second sets of stacked diffs can be scrolled together.

Hughes discloses:

- wherein the first and second sets of stacked diffs can be scrolled together (*see Column 12: 43-56, “The original source code and new source code can be scrolled up and down together by activation of vertical scroll bar 1505. Respective first and second source code windows each have a corresponding respective horizontal scroll bar 1506, 1513 for enabling horizontal scrolling of code items within the source code windows.”*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Hughes into the teaching of Fontes to include wherein the first and second sets of stacked diffs can be scrolled together. The modification would be obvious because one of ordinary skill in the art would be motivated to improve usability in visual comparison of the software files.

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10. **Claim 11** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Fontes** in view of **Percival** as applied to Claim 10 above, and further in view of US 6,407,753 (hereinafter “**Budinsky**”).

As per **Claim 11**, the rejection of **Claim 10** is incorporated; however, Fontes and Percival do not disclose:

- undoing the selection and copying steps.

Budinsky discloses:

- undoing the selection and copying steps (*see Column 9: 35-38, “A determination is then made as to whether the selected rule is disabled (step 603), for example, by either an ‘Undo’ operation manually selected by the user, or manually disabled by the user upon viewing the rule set.”*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Budinsky into the teaching of Fontes to include undoing the selection and copying steps. The modification would be obvious because one of ordinary skill in the art would be motivated to revert selected data back to its original state.

#### ***Response to Arguments***

11. Applicant’s arguments filed on June 3, 2008 have been fully considered, but they are not persuasive.

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***In the Remarks, Applicant argues:***

a) Percival fails to remedy the deficient disclosure of Fontes. Further, Percival is cited merely to show the existence of "text files and lines of text." Office Action dated December 7, 2007, p. 5 ("Office Action"). Like Fontes, Percival describes a system in which a user may modify a file, only by choosing between different, previously modified, versions of the file. Specifically, "The user may then resolve any differences between the various versions by visually selecting a preferred one of the versions." Percival, col. 1, lines 47-49. Thus, in Percival, the modifications available to a user are restricted to those proposed by the system, no "user-generated" modifications to a merged result generated from merging a first text file and a second text file is modified via a conflict resolution pane. At most, Percival describes an "Edit button 344" which merely "allows the user to edit a selected line" in one of the files being merged, referred to in Percival as "the Merge Target," and to use this edited file in the subsequent merge through a "Use Merge target' button 346," which "becomes active when all differences have been resolved." Percival, col. 5, lines 1-3; FIG. 3. Hence, in Percival a user is not able to modify the results of a merge, but must edit one of the files used in the merge, then perform a second merge that includes the edited file, so Percival is unable to introduce user-generated modifications into a merged result using a conflict resolution pane. Rather, Percival also limits options available to a user for making modifications to selecting between already modified versions of the files to be merged. There is no "conflict resolution pane which accepts user-generated textual modifications to the merged result" disclosed in Percival, so users cannot introduce user-generated modifications directly into the merged result.

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***Examiner's response:***

a) Examiner disagrees. Contrary to the Applicant's assertion, Percival clearly discloses "providing to a user a conflict resolution pane which accepts user-generated textual modifications to the merged result" (see Figure 8: 704; Column 4: 67 to Column 5: 1 and 2, "An *Edit*" button 344 allows the user to edit a selected line in the Merge Target ..." and 60-67, "If the response to decision block 960 is yes (the user is merging the versions), the system highlights the differences and places selection emphasis on the next one at block 964. The user selects the DataBase or Local version of that difference at block 966, and the system places it into the Merge Target, preserving the color to show the origin at block 968. The user may then edit the line, if desired, by selecting the Edit button." ). Note that the user is merging the versions of the files for which a collision was detected. As illustrated in Figure 8, the collisions are reconciled in the Merge Target. Thus, the Merge Target contains the merged result of the versions of the files for which a collision was detected. The user can then edit a line in the Merge Target by selecting the Edit button.

***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).



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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Qing Chen whose telephone number is 571-270-1071. The Examiner can normally be reached on Monday through Thursday from 7:30 AM to 4:00 PM. The Examiner can also be reached on alternate Fridays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wei Zhen, can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/QC/

August 21, 2008

/Wei Y Zhen/

Supervisory Patent Examiner, Art Unit 2191